

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

**Weekend Word Problem #4: Pythagorean Theorem**

**The Situation:** Ms. Lee leans a ladder against a tree to rescue a cat. The ladder is able to reach the height (fourteen feet) of the cat in the tree and the ladder is eight feet away from the base of the tree. (Assume that the tree makes a right angle with the ground.)

1. Use the Pythagorean Theorem and the diagram below to find the length of the ladder. Round to the nearest tenth, if necessary.

**Answer:** The length of the ladder is \_\_\_\_\_ ft.

2. Using the same ladder, Ms. Lee wants to clean the windows of his house that are eleven feet high. How far away from the base of the house should she place the ladder to reach the windows? Round to the nearest tenth, if necessary. (Assume that the house makes a right angle with the ground.) Hint: draw a picture!

**Answer:** Ms. Lee should place the ladder \_\_\_\_\_ feet away from the base of the house.

3. Did you find the picture provided for #1 helpful? Was it more difficult to answer #2 because there was no picture? Explain using at least THREE COMPLETE SENTENCES.

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